Winter Weather Awareness

A Campaign by the National Weather Service and the Tennessee Emergency Management Agency

November 16-18, 2004

Winter is approaching. Hazardous weather can strike with little notice. Tornadoes strike with unwanted regularity. As winter approached two years ago, Tennesseans experienced the secondary severe weather maximum at its worst with the Veterans Day Tornado outbreak. Severe thunderstorms with downburst winds and large hail occur even more frequently. Floods and flash floods can wash people and property away with little notice.

Summer has ended, and fall is here. The National Weather Service and the State Emergency Management Agencies would like to bring another weather threat to the forefront and heighten everyone's awareness of this significant weather threat – Winter Weather.

Last winter was a little nearer to normal there were two snow events across the Mid South. February 15th saw a snowstorm move across Northern Mississippi and the southern portions of West Tennessee where portions of Hardeman, McNairy and Chester Counties received with 4 to 6 inches of snow in many areas.

The spring of 2004 may remember as the latest that measurable snow fell over portions of southwest Tennessee. On April 13th, between 2 and 4 inches fell east of the Memphis metropolitan area. The latest measurable snowfall in Jackson, TN previous to this event was April 5th, 1971.

The snow made for slick driving conditions for the morning commute. There were reports of scattered power outages because of the weight of the heavy snow brought power lines down. Many schools and businesses were forced to close.

During January 1994 we saw many areas of the Mid South experience a major ice storms People were inconvenienced, injured or with one fatality at Memphis State University.

Even without snow or ice, intense cold can injure or kill before a person is aware they are at risk. Fatalities from hypothermia have occurred in air temperatures of 40-50 degrees. Persons with certain chronic health conditions and those over 65 are more at risk for hypothermia, **even within the home.**

One hazard we do not often associate with winter is flooding. Floods occur when too much rain or melted snow fill river or creek basins too quickly. Along Tennessee's rivers and streams, flooding is a natural part of life and most common during winter and early spring. Frozen ground, sparse vegetation, and less evaporation are all factors that allow water to run off the land and reach the rivers quickly during the cold months.

The National Weather Service in Memphis and the Tennessee State Emergency Management Agency will highlight November 16th-18th to bring these hazards to the attention of the public. We will be sending information through our communications network including the National Weather Service's NOAA Weather Radio during this period. We hope you will all join in this effort to make this the safest winter possible.

A Word on the Mid South Weather

Winter in the Mid South and the surrounding area can vary considerably from month to month or even week to week. Our winters can be cold with temperatures falling well below zero to relatively warm. Snowfall varies from a few inches during a winter to over one foot.

Freezing rain can devastate much of the area within a few hours.

Flooding can be very significant event during these months.

During this year's Winter Weather Awareness Week, we at the National Weather Service and the Tennessee Emergency Management Agency want to emphasize the importance of being prepared and planning ahead For these winter events.

It is important to know about the impending weather, particularly when traveling. You also should know the proper actions to take to ensure you and your family will be safe.

The material included in this pamphlet will aid you in determining the proper planning, preparation and planning to take.

Know the Threat!!

Snow and Freezing Rain

Heavy snow and/or freezing ran can immobilize a region and paralyze a city. Accumulations of snow can collapse buildings and knock down trees and power lines. Rural areas may be isolated for days. It is recommended that each household have provisions and the ability to remain self-sufficient for at least 3 days without power, or help, as it may take this long to reopen main roads and reestablish vital services.

Wind Chill

Wind Chill is based on the rate of heat loss from exposed skin caused by the combined effects of wind and cold. As the wind increases, heat is carried away from the body at an accelerated rate, driving down the body temperature. Animals are also affected by wind chill. The biggest question that always comes up with wind chill is, does it affect water pipes and car radiators. The answer is no, the accelerated loss of heat occurs on exposed skin only.

Hypothermia

Warning Signs

Uncontrollable shivering, memory loss, disorientation, incoherence, slurred speech, drowsiness and apparent exhaustion.

Detection

Take the person's temperature. If below 95 degrees F, immediately seek medical care. This is a life threatening situation. If care is not immediately available, begin warming the person slowly. Warm the core first. Get the person into warm clothing and wrap them in a warm blanket covering the head and neck. Do not give the person alcohol, drugs, coffee, or any very hot beverage or food, warm broth is better. Do not warm the extremities first, this drives cold blood toward the heart and may cause heart failure.

Frostbite

Frostbite is damage to body tissue caused by the tissue being frozen. Frostbite causes the loss of feeling and a white or pale appearance in extremities, such as fingers, toes, earlobes, or the tip of the nose. If symptoms are detected, get medical help IMMEDIATELY. If you must wait for help, slowly re-warm affected areas. If the person is also showing signs of hypothermia, warm the body core before the extremities.

Flooding

Flooding is the number one weather killer in the United States annually. Whether or not you live in a flood prone location, you will likely still be affected by flooded roads, or power and water outages from flooding during the next year. Most people killed in flooding die in their vehicles. NEVER drive onto flooded roads. One foot of running water is enough to sweep away most cars. If flooding begins to affect you in your car, abandon it immediately and head for higher ground. You should keep at least three days' worth of clothes, non-perishable foods and medications, and personal supplies on hand for each person in your family, in case flooding affects your home. Store these supplies in a sturdy waterproof container

Before the Storm - Know the Terms

A Winter Weather Advisory is issued when ice or snow is expected to hinder travel, but conditions are not serious enough to require warnings.

Freezing rain is forecast when expected rain is likely to freeze as soon as it strikes the ground, potentially creating a coat of ice on roads and walkways. Sleet consists of small particles of ice mixed with rain. Sleet causes roads to freeze and become slippery.

A winter storm watch means that severe winter weather is possible within the next day or two.

A Winter Storm Warning means that severe winter weather conditions are expected within the next 24 hours. A blizzard warning means that heavy snow and winds of 35 mph or more are expected.

Be Prepared – Keep a battery powered radio and flashlights in working order, stock extra batteries.

Before the Storm - Preparations

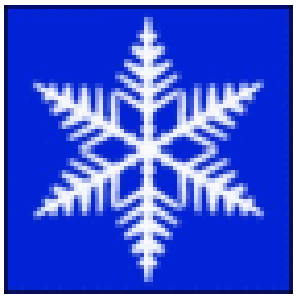
Be Prepared – Keep a battery powered radio and flashlights in working order, stock extra batteries.

Store drinking water and have food that can be prepared without an electric or gas stove. Stock emergency water and cooking supplies. Have candles and matches available in case of a power outage. Be careful how you use them.

Be certain that needed medications are available.

Be Prepared for isolation at home – Make sure you have sufficient heating fuel; regular fuel sources may be cut off. Have some kind of emergency heating equipment and fuel so that you can keep at least one room warn, but do NOT use a gas fired grill inside the home. Take measures to protect plumbing from freezing. Contact local utilities for winter tips.

Keep your car or truck "winterized" - Winterizing includes being certain about antifreeze protection levels and use a gasoline additive to reduce gasoline freezing. Carry a "Winter Car Kit" that includes high energy foods, a windshield scraper, flashlight, tow rope or chain, shovel, tire chains, blanket, bag of sand or salt, fluorescent distress flag and an emergency flare – all in case you're trapped in your vehicle by a winter storm. Keep extra gloves, mittens, hats, earmuffs and outerwear in the vehicle throughout the winter.



During the Storm

Stay Informed – Listen to radio or television for updates on weather conditions. With early warning, you may avoid being caught in the storm, or at least be better prepared to cope with it.

Dress for the season : Avoid getting wet – Many layers of thin clothing are warmer than a single layer of thick clothing. Mittens are warmer than gloves. Wear a hat; most body heat is lost through the top of the head. Cover your mouth to protect lungs; don't directly inhale extremely cold air.

Overexertion can bring on a heart attack – a major cause of death during and after winter storms – If shoveling snow isn't critical, don't do it. If you must shovel, don't overexert yourself.

If you are isolated at home – Conserve fuel by keeping your house cooler than usual and by "closing off" heat to some rooms. When kerosene heaters are used, maintain ventilation to avoid toxic fumes. Use only the fuel recommended by the manufacturer and follow operating instructions. Use a carbon-monoxide detector/alarm and a smoke alarm.

Do Not Drive into Worsening Conditions – If you must travel, take winter driving seriously. Travel by daylight, and keep others informed of your schedule. Drive with extreme caution. Never try to save time by driving fast or by using back-road shortcuts.

If a Blizzard traps you in your vehicle – Pull off the highway, stay calm and remain in your vehicle where rescuers are most likely to find you. Set your directional lights to "flashing" and hang a cloth or distress flag from the radio antenna or window.

Do not set out on foot unless you can see a building close by where you know you can take shelter. Be careful: distances are distorted by blowing snow. A building may seem close, but actually may be too far away to walk to in deep snow.

Trapped in a Vehicle

If you run the engine to keep warm, open a window slightly for ventilation. This will help protect you from possible carbon monoxide poisoning. Periodically clear away snow from the exhaust pipe.

Exercise to maintain body heat, but avoid overexertion. In extreme cold, use road maps, seat covers, and floor mats for insulation. Huddle with passengers and use your coats as blankets.

Never let everyone in the car sleep at one time. One person should always be awake to look out for rescue crews.

Be careful not to use up all battery power. Balance electrical energy needs – the use of lights, heat and radio with supply. At night, turn on the inside dome light, so work crews can spot you.

If in a remote area:

Spread a large cloth or the vehicle floor mats on the snow to attract rescue personnel who may be surveying the area from above. Once the blizzard passes, you may need to leave the car and proceed on foot to better shelter.

Keeping in Touch After any disaster, friends, relatives, insurance adjusters, etc. may need to locate you and your family. The following tips may reduce the confusion associated with making contact:

Evacuations

(1) Before evacuating your home, establish a contact person (and phone number) out of the potential disaster area where friends and relatives should "check-in" with each other.

(2) When you evacuate, consider leaving a note, securely

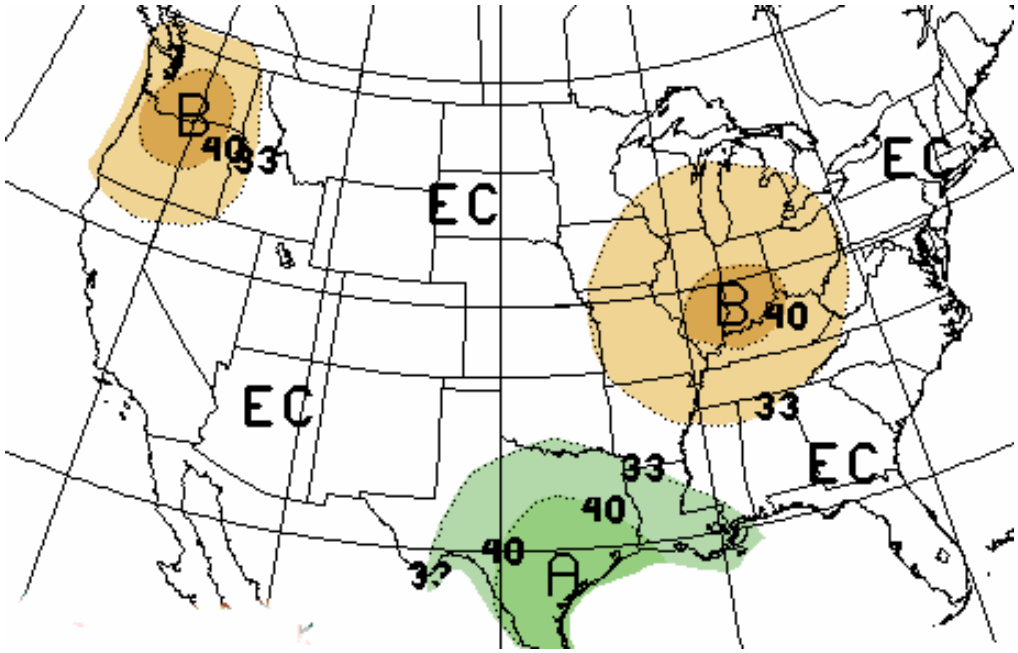
attached to the front door, telling where you can be reached – but only if you have reason to believe someone might come looking for you.

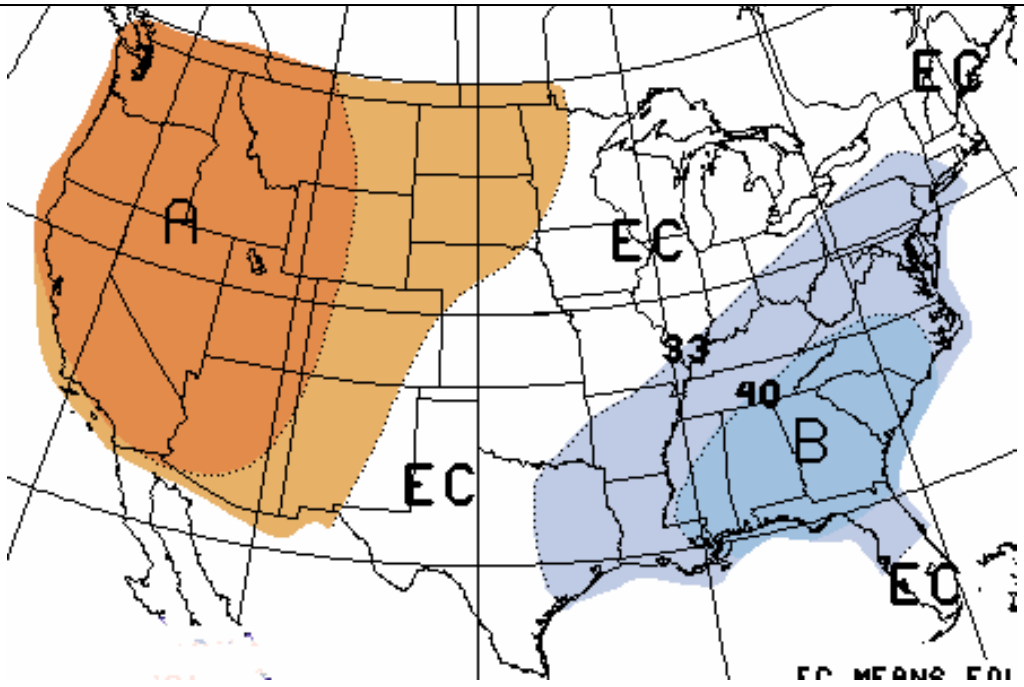
(3) If widespread damage occurs, insurance adjusters or others might have trouble identifying your home or finding you. After the danger is over, therefore, consider spray painting the following information somewhere that is highly visible: Name, address, insurance company, policy number and contact number

Winter Outlook—Dec 2004—Feb 2005

(B—Below Normal, A—Above Normal, EC—Equal Chance of Normal

Precipitation





Temperature

Mid-South Snow Information

The following is a table of average (30-year normal) snow-fall for the climatological stations across the Mid-South, separated by month.

Month	Memphis	Jackson	Dyersburg	Jonesboro	Tupelo
November	0.1"	0.1"	<0.1"	0.2"	<0.1"
December	0.7"	0.3"	0.8"	1.0"	0.1"
January	2.6"	3.0"	3.3"	2.6"	0.6"
February	1.4"	2.2"	3.0"	2.1"	0.4"
March	0.9"	1.0"	1.4"	1.4"	0.3"
Yearly	5.7"	6.6"	8.5"	7.3"	1.4"